

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

# The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

07/13/2011

Maria Markos Assistant District Attorney, Essex County

Dear ADA Markos,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:



- 1. Curriculum Vitae for Annie Dookhan and Daniela Frasca.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Daniela Frasca was the custodial chemist and performed the preliminary testing and net weight for this sample. Annie Dookhan was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

10~-

Annie Dookhan

Chemist II

Sincerely

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6631

#### Curriculum Vitae

#### Annie Khan (Dookhan)

#### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

### Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of all analytical instruments.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \* Responsible for the Quality Control/Quality Assurance program for the drug lab.
- \*Notary Public.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### Additional Training:

Dept. of Justice - Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

#### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

# Education

## Boston University School of Medicine, Boston MA

Currently enrolled in the Biomedical Forensic Science MS Program

## Suffolk University, Boston, MA

Graduated in 05/1996 and received a Bachelor of Science in Biochemistry

## **EXPERIENCE**

Massachusetts State Laboratory Institute/DPH, Jamaica Plain, MA 01/2001 – present Drug Laboratory: Chemist II

- Analysis of all substances by chemical screening, microscopy, and instrument confirmation to determine the presence of drugs for law enforcement agencies in the Commonwealth of Massachusetts.
- Appointed assistant analyst on January 29, 2001 by the Assistant Commissioner of DPH
- Completed four weeks of training in drug analysis under the supervision of senior chemists.

# Quest Diagnostics Incorporated, Cambridge, MA

09/1996 - 10/2001

Department of Toxicology: Medical Technologist I

- Handles comprehensive toxic analysis, therapeutic drug monitoring, forensic drug screening, and compound ID's of biohazard samples utilizing standard operating procedures in clinical toxicology.
- Entered data and interpreted results for reporting
- QC/QA of multiple analytical instrumentation as well as maintenance
- Completed 60 days of training under the supervision of doctorate level toxicologists.

# **Additional Training**

## Northeastern Association of Forensic Scientists

Designer Drugs

Clandestine labs

Agilent Instruments and Software

Digital Photography

## McCrone Research Institute

Forensic Polarized Microscopy

Polarized Microscopy of Illicit Drugs and Excipients

# Massachusetts State Laboratory Institute

**Expert Witness** 

Raman Spectroscopy

# **Associations and Programs**

	Northeastern Association of Forensic Scientists (NEAFS)	2001 - present
•	The International Association of Forensic Toxicologists (TIAFT)	2003 - present
	The International Association of Therapeutic Drug Monitoring	2003 - present
	And Clinical Toxicology (IATDMCT)	
•	Massachusetts State Science Fair Judge	2000 - present
•	Middle School State Science Fair Judge	2006 - present
•	Volunteer Science Project Mentor/Tutor	2003 - present
	for the TTT Mentor Program	

## PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

Boston Drug Laboratory Tel (617) 983-6622 Fax (617) 983-6625

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
State Laboratory Institute

Amherst Drug Laboratory Tel (413) 545-2601 Fax (413) 545-2608

Boston Hours 8:00 - 11:00 2:00 - 4:00	DRUG RECEIPT		Amherst Hours 9:00 – 12:00 1:00 – 3:00
	Yw	Police Reference N	0.:
Name and Rank of Submitting	g Officer: DZT MAC	RK RICHMOND	
Defendant(s) Name (last, first,	initial):		
To be completed by Submitter  Description of Items Submitte	d	To be complete Gross Weight	ed by Lab Personnel Lab Number
1 PB WP	(COGAIN	1.84 gr	
	·		
Received by:	2	Date:	0-1-10

No.

Date Analyzed: 12-3-10

City: Lynn Police Dept.

Officer: Detective MARK RICHMOND

Def:

Amount:

100

Subst: SUB

No. Cont: 1 Cont: pb
Date Rec'd: 10/01/2010

10,0,7,20

Gross Wt.:

1.84

No. Analyzed:

Net Weight: 0, 22

# Tests:

2950

Prelim:

Findings:

cocario

	WDER ANALYSIS FORM	
SAMPLE #	AGENCY	ANALYST OF
PHYSICAL DE	SCRIPTION:	Ev. mack
	Pander in 1	03
	Marg -	6000 WN 0 7567
	Proed -	Gross M. O. 35873 (danble bagged)
	Meck -	
	Cabalt + blue	Nam: 0.224/9
	Gold +	

PRELIMINARY TEST RESULTS

RESULTS Cacina

TUTAT

GC/MS CONFIRMATORY TEST

MS //SD DATE / 2/3//

Information from Data File:

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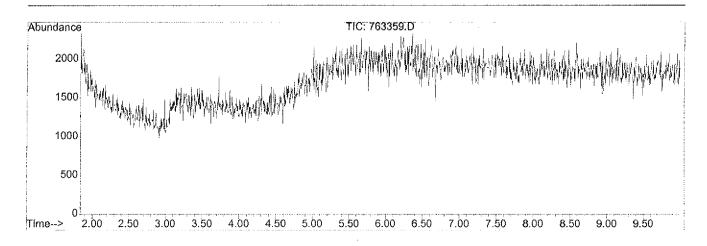
Operator : ASD

Date Acquired : 30 Dec 2010 23:51

Sample Name : BLANK

Submitted by :

Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

763359.D

Tue Jul 12 12:39:17 2011

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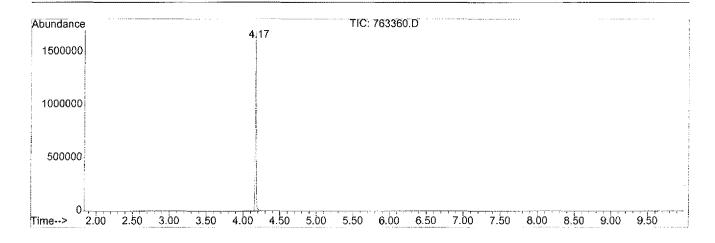
Operator : ASD

Date Acquired : 31 Dec 2010 00:04

Sample Name : COCAINE STD

Submitted by :

Vial Number : 5
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.167	1517922	100.00	100.00

763360.D

Tue Jul 12 12:39:20 2011

File Name :  $F:\Q4-2010\SYSTEM6\12_30_10\763360.D$ 

Operator : ASD

Date Acquired : 31 Dec 2010 00:04

Sample Name : COCAINE STD

Submitted by :

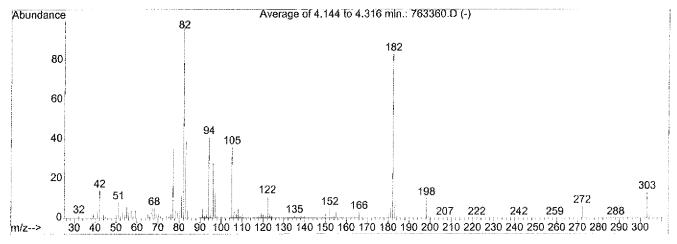
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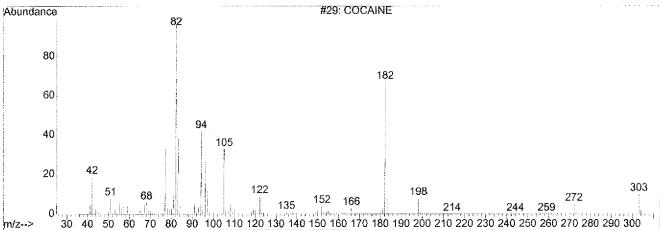
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C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
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763360.D

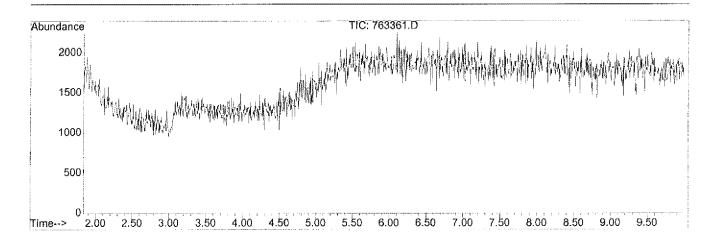
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Operator : ASD

Date Acquired : 31 Dec 2010 00:17

Sample Name : BLANK Submitted by : DXF Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

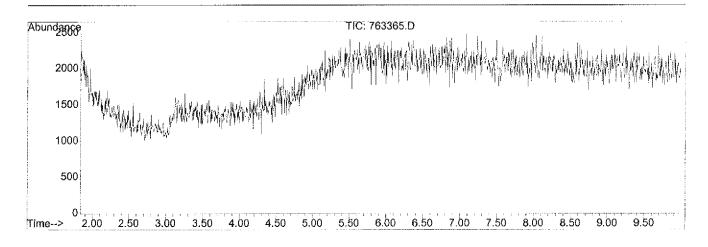
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Operator : ASD

Date Acquired : 31 Dec 2010 1:10

Sample Name : BLANK Submitted by : DXF Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

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763365.D

Tue Jul 12 12:39:32 2011

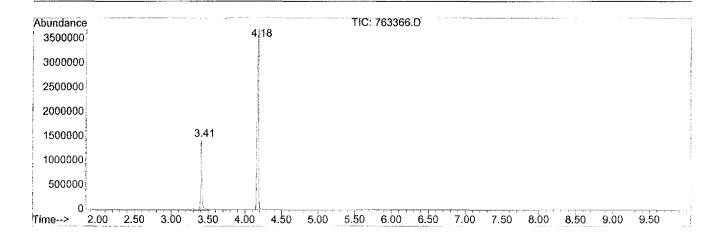
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Operator : ASD

Date Acquired : 31 Dec 2010 1:23

Sample Name :

Submitted by : DXF
Vial Number : 66
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.408	1657549		31.74
4.179	5221773		100.00

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Date Acquired : 31 Dec 2010 1:23

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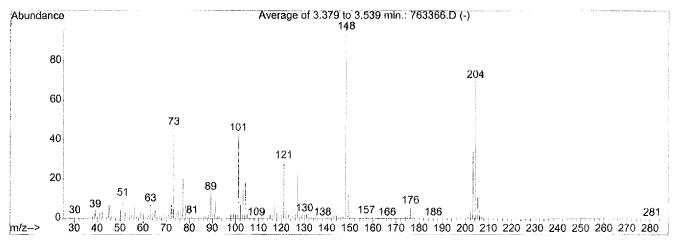
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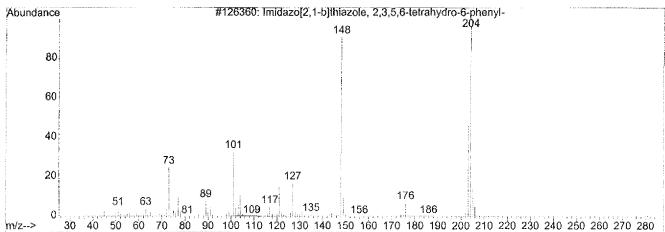
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C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

Imidazo[2,1-b]thiazole, 2,3,5,6-tet 006649-23-6





763366.D

Tue Jul 12 12:39:35 2011

Page 2

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File Name :  $F:\Q4-2010\SYSTEM6\12\ 30\ 10\763366.D$ 

Operator : ASD

Date Acquired : 31 Dec 2010 1:23

Sample Name :

Submitted by : DXF
Vial Number : 66
AcquisitionMeth: DRUGS
Integrator : RTE

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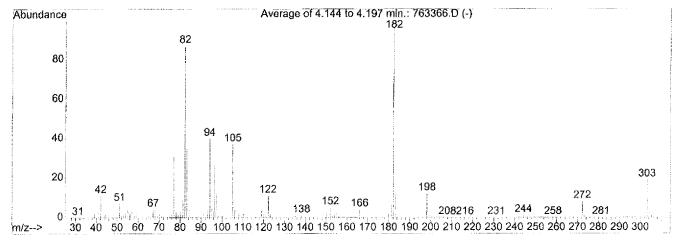
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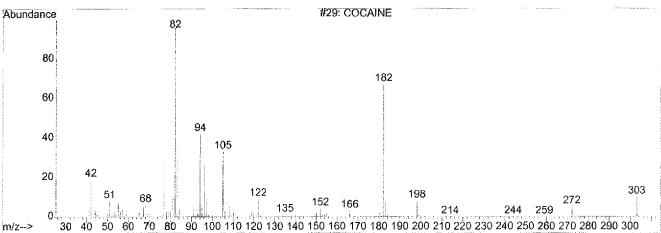
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PK# RT Library/ID CAS# Qual

2 4.18 C:\DATABASE\SLI.L COCAINE

000050-36-2 99





763366.D

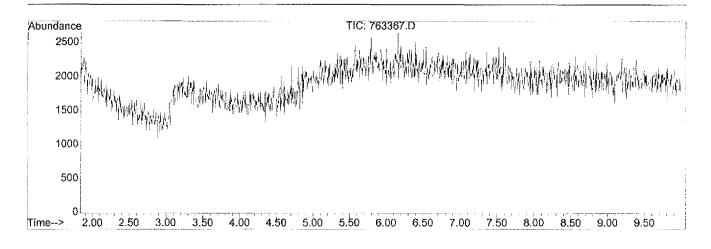
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Operator : ASD

Date Acquired : 31 Dec 2010 1:36

Sample Name : BLANK Submitted by : DXF Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

<sup>\*\*\*</sup>NO INTEGRATED PEAKS\*\*\*

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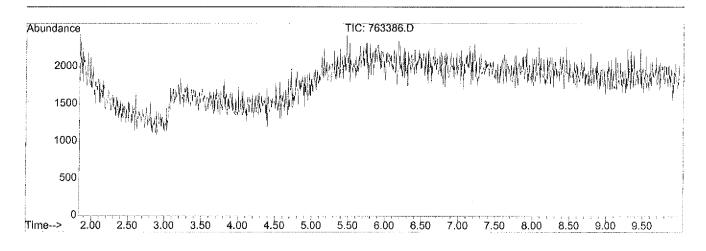
Operator : ASD

Date Acquired : 31 Dec 2010 5:45

Sample Name : BLANK

Submitted by

Vial Number 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

Information from Data File:

File Name : F:\Q4-2010\SYSTEM6\12\_30\_10\763387.D

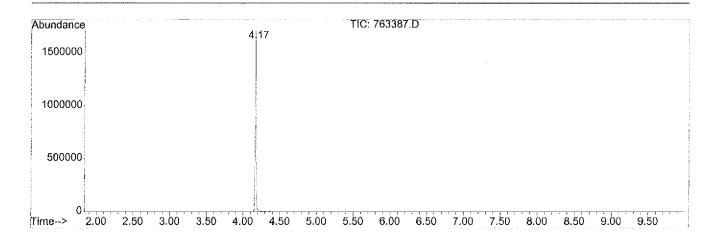
Operator : ASD

Date Acquired : 31 Dec 2010 5:58

Sample Name : COCAINE STD

Submitted by

Vial Number 5 : AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.167	1502206	100.00	100.00

File Name :  $F:\Q4-2010\SYSTEM6\12\ 30\ 10\763387.D$ 

Operator : ASD

Date Acquired : 31 Dec 2010 5:58

Sample Name : COCAINE STD

Submitted by :

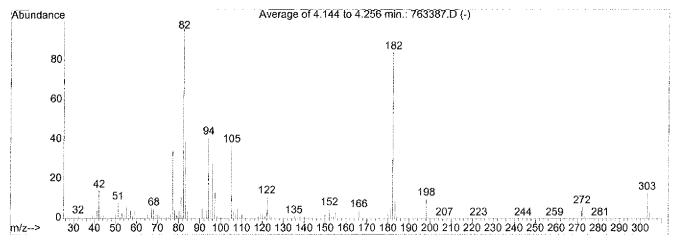
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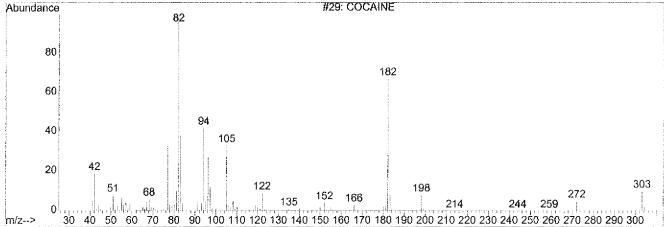
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C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
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763387.D

Tue Jul 12 12:39:52 2011

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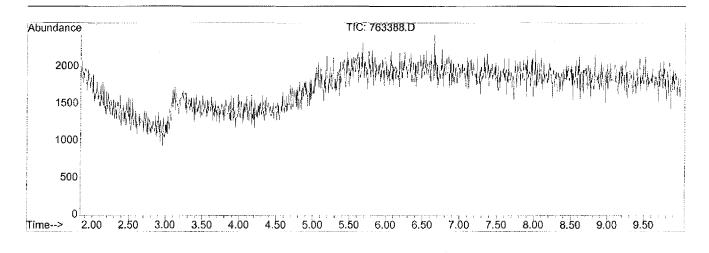
Operator : ASD

Date Acquired : 31 Dec 2010 6:11

Sample Name : BLANK

Submitted by

Vial Number AcquisitionMeth: DRUGS Integrator : RTE



Ratio % Ret. Time Area Area

\*\*\*NO INTEGRATED PEAKS\*\*\*